

Fleetguard

CASE
SUMMARY

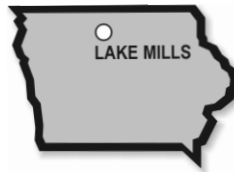
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FLEETGUARD

Lake Mills, Iowa
Winnebago County

Intern: Luke Streit
Major: Agricultural Engineering
School: Iowa State University



The Company

Fleetguard manufactures fuel, lubricant, coolant and hydraulic filters for diesel engines and hydraulic systems. The company sends product to 117 countries worldwide. Fleetguard is owned by Cummins, Inc., and has two plants in Lake Mills with a total of 550 employees.

Project Background

Fleetguard is ISO 9001 certified and has set a goal to be ISO 14001 certified in 2003. The environmental policy statement has been adopted from Cummins and an Environmental Management System is currently under construction in order to help achieve that goal. Fleetguard presently recycles cardboard, metal, shop rags and office paper.

Incentives to Change

Fleetguard realizes that to be competitive in today's industrial market, they have to maintain and continually implement environmentally sound business practices. More and more customers are requiring suppliers to be ISO 14001 certified, and Fleetguard does not want to be left behind.

Results

The intern's projects are summarized as follows:



The main purpose of the project was to aid in the planning and implementation of the EMS. Prior to this project, the only part of the EMS that had been developed was the environmental policy, which was adopted from the parent company, Cummins, Inc. The intern documented aspects and impacts for all plant operations and locations. Next, the intern helped to organize team meetings to rank, or prioritize, the aspects for each area. Spreadsheets were created regarding the aspects for each operation and will be completed and maintained by Fleetguard personnel every year. The foundation of the EMS was completed during the project.

One of Fleetguard's most obvious solid waste problems was scrap filters. An average of 67 solid tons of waste per year are produced. A scrap steel vendor, Marpe Metals, was contacted and is now collecting all of Fleetguard's scrap filters so the steel can be reused. The program will save about \$2400 annually in disposal costs. The only large cost associated with the project was the lean-to structure built to store the main collection hoppers.

The largest solid waste stream at Fleetguard is the round plywood pallets used for the purchased filter paper, which comes in coils. The pallets account for about 81 tons of waste annually. The pallets cannot be recycled due to the glue within the plywood. However, several employees expressed an interest in taking the pallets for personal purposes. Therefore, the pallets are being saved for employees, free of charge. If all of the pallets are saved, Fleetguard can save about \$4400 per year in disposal costs.

Fleetguard has four large presses used to manufacture the can, or shell, of the filter. These presses are cooled with water, which does not come into contact with the process. Currently, the wastewater is pumped down the sewer system. Water consumption totals around 21.6 million gallons per year and costs about \$45,000 in water and sewer fees. The intern has proposed a project to replumb the water from the four presses through a cooling tower and then recirculate the water back to the presses. The project is being pursued by Fleetguard.

A two-day trial collection at the main plant yielded 110 pounds of plastic film. Therefore, Fleetguard could collect and recycle about 22,000 pounds of plastic film every year, for a disposal savings of around \$2700. However, warehouse space and capital costs are an issue, as another baler would need to be purchased. This project is recommended, but implementation is pending.

The waste reduction opportunities that have been implemented will reduce Fleetguard's solid waste by 36% and save the company about \$6800 annually. If all projects are implemented, Fleetguard could reduce their solid waste by a total of 39% and their water consumption by 86%, saving \$54,500 every year.

